

**Steens Mountain Cooperative
Management & Protection Area**

Oregon Museum of Science and Industry

and Desert Trail Association

Backpacking & Overnight Camping

ENVIRONMENTAL ASSESSMENT

OR-04-027-069

Bureau of Land Management
Burns District Office
28910 Hwy 20 West
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CHAPTER I. INTRODUCTION: PURPOSE OF AND NEED FOR ACTION

A. Introduction

The passage of the Steens Mountain Cooperative Management and Protection Act of 2000 (Steens Act) created Steens Mountain Cooperative Management and Protection Area (CMPA) and Steens Mountain Wilderness (Wilderness). Seven existing Special Recreation Permit (SRP) holders were recognized by the Steens Act and their permitted use analyzed in Environmental Assessments (EAs) OR-027-02-022, OR-020-03-036, OR-020-03-037, OR-020-03-038, OR-020-03-039, OR-020-03-040, and OR-020-03-041. In 1999 an EA (OR-020-99-24) analyzed commercial SRP day use trip activities on the Burns District of the Bureau of Land Management (BLM). These activities included, sightseeing, day hikes, day tours, and nature study but not overnight backpacking and camping activities.

Since that time there have been two applications made to the Burns District for new SRPs by commercial, educational and private organizations. These activities would take place throughout the CMPA, including the Wilderness and the Wilderness Study Areas (WSAs) located in the CMPA. These are new uses and activities and include day hiking and overnight backpacking trips by educational, commercial and private organizations.

Evaluation of the effects associated with these activities would allow the BLM to comply with Section 115 of the Steens Mountain Cooperative Management and Protection Act of 2000 and the Wilderness Act of 1964 and to better manage the CMPA and Wilderness through SRP authorization.

Completion of this Environmental Assessment (EA), the Finding of No Significant Impact (FONSI), and the Decision Record would allow such activities to occur within the CMPA. This analysis references parts of previous EA (OR-020-03-038).

B. Purpose of and Need for Action

The proposed action would provide opportunities and experiences for visitors to the CMPA, including Steens Mountain Wilderness and Wilderness Study Areas for specialized recreation activities. The proposed action would allow for new uses by the Oregon Museum of Science and Industry (OMSI) and the Desert Trail Association (DTA) providing them opportunities to hike, backpack, and camp overnight in the CMPA, including the Wilderness, with special recreation permit authorization.

The Oregon Museum of Science and Industry (OMSI) will be providing two educational outdoor science camps in the CMPA during 2004. The camps provide instruction to middle school and high school students about non-disruptive biological and geological field investigations. Students and instructors will be backpacking and camping in the Wilderness during a portion of each science camp.

The Desert Trail Association (DTA) is a non-profit recreation oriented organization dedicated to the development of the National Desert Scenic Trail and the preservation of the western desert. August 5 through August 7, 2004 the DTA will be sponsoring a backpack trip in Kiger Gorge in the CMPA and Wilderness. DTA officers will lead the trip which begins at Kiger Overlook and travels down into the Gorge traveling its entire length, including privately-owned lands in the lower half of the canyon.

A special recreation permit is required if an organization charges a fee to clients, participants or group members participating in activities taking place on BLM administered lands, or if the group meets other criteria under 43 CFR 2930. OMSI and the DTA have applied to Burns District BLM for SRPs for the 2004 field season. This Environmental Assessment (EA) will analyze the effects of backpacking and overnight camping by these groups on the lands and resources of the CMPA, including the Wilderness.

C. Pertinent Sections of the Steens Act and the Wilderness Act

The Steens Act created the CMPA and designated the Steens Mountain Wilderness. The following Steens Act sections relate directly to the proposed action and alternative.

SECTION 1. SHORT TITLE; PURPOSES; TABLE OF CONTENTS

(b) PURPOSES.--The purposes of this [Steens] Act are the following:

(1) To maintain, the cultural, economic, ecological, and social health of the Steens Mountain Area . . .

(2) To designate the Steens Mountain Wilderness.

(5) To provide for and expand cooperative management activities between public and private landowners in the vicinity of the Wilderness Area and surrounding lands.

(10) To maintain and enhance cooperative and innovative management practices between the public and private land managers in the Cooperative Management and Protection Area.

(11) To promote viable and sustainable . . . recreation operations on private and public lands.

(13) To authorize only such uses on Federal lands in the Cooperative Management and Protection Area that are consistent with the purposes of this Act

SEC. 102. PURPOSE AND OBJECTIVES OF COOPERATIVE MANAGEMENT AND PROTECTION AREA.

(a) PURPOSE.-- . . . to conserve, protect, and managed the long-term ecological integrity

of Steens Mountain for future and present generations.

(b) OBJECTIVES.--To further the purpose specified in subsection (a), and consistent with such purpose, . .

(2) to promote . . . , recreation, . . . , and other uses that are sustainable;

(4) to ensure the conservation, protection, and improved management of the ecological, social, and economic environment of the Cooperative Management and Protection Area, including geological, biological, wildlife, riparian, and scenic resources; . . .

SEC. 111. MANAGEMENT AUTHORITIES AND PURPOSES

(a) IN GENERAL -- The Secretary shall manage all Federal lands included in the Cooperative Management and Protection Area pursuant to the Federal Land Policy and Management Act of 1976 (43

U.S.C. 1701 et seq.) and other applicable provisions of law including this Act, in a manner that:

(1) ensures the conservation, protection, and improved management of the ecological, social and economic environment of the Cooperative Management and Protection Area, including the geological, biological, wildlife, riparian, and scenic resources, North American Indian tribal and cultural and archaeological resources sites, and additional cultural and historic sites; and

(2) recognizes and allow current and historic recreational use.

SEC. 115. SPECIAL USE PERMITS

The Secretary may renew a special recreational use permit applicable to lands included in the Wilderness Area to the extent that the Secretary determines that the permit is consistent with the Wilderness Act (16 U.S.C. 1131 et seq.). If renewal is not consistent with the Wilderness Act, the Secretary shall seek other opportunities for the permit holder through modification of the permit to realize historic permit use to the extent that the use is consistent with the Wilderness Act and this Act, as determined by the Secretary.

SEC. 204. TREATMENT OF WILDERNESS STUDY AREAS.

(a) STATUS UNAFFECTED. Except as provided in Section 502, any wilderness study area, or portion of a wilderness study area, within the boundaries of the Cooperative Management and Protection Area, but not included in the Wilderness Area, shall remain a wilderness study area notwithstanding the enactment of this Act.

(b) MANAGEMENT. The wilderness study areas referred to in subsection (a) shall continue to be managed under Section 603(c) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1782(c)) in a manner so as not to impair the suitability of the areas for preservation as wilderness.

The Wilderness Act of 1964 also relates directly to the proposed action and alternative.

SECTION 4. USE OF WILDERNESS AREAS

(b) . . each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area and shall so administer such area for such other purposes for which it may have been established as also to preserve its

wilderness character. . . .

(c) Except as specifically provided in this Act, . . . , there shall be no commercial enterprise . . . within any wilderness area . . .

(d)(6) Commercial services may be performed within the wilderness areas . . . to the extent necessary for activities which are proper for realizing the recreational or other wilderness purposes of the areas.

D. Land Use Plan Conformance

The Andrews Management Framework Plan (MFP). Adopted in 1982 the MFP was developed to provide direction and guidance for specific management actions associated with the public lands within the Resource Area. While the MFP does not directly address the proposed action and alternative one of the stated objectives of the MFP is listed on page 7 of that document as: “Provide a variety of recreation opportunities including developed sites, dispersed recreation, off-road vehicles and limited access areas.”

The proposed action analyzed in this EA conform to the Andrews/Steens Draft Resource Management Plan and Environmental Impact Statement of 2004 regarding commercial and group recreation use in Steens Mountain Cooperative Management and Protection Area and Steens Mountain Wilderness, except that Party size limits in the wilderness are not in effect until approval of the Record of Decision for the RMP expected in late 2004, after the completion of these SRPs.

In addition, the actions proposed conform to the intent of Steens Mountain Wilderness and Wild and Scenic Rivers Management Plan regarding the described activities, except that party size limits in the wilderness are not in effect until final approval of the Management Plan expected in late 2004, after the completion of these SRPs.

Issuance of a permit would be in compliance with all State, local, and tribal government laws, regulations, and land use plans.

CHAPTER II. ALTERNATIVES INCLUDING THE PROPOSED ACTION

A. Proposed Action

The proposed action would allow the issuing of Special Recreation Permits (SRPs) for recreational activities in the CMPA, including Steens Mountain Wilderness and all Wilderness Study Areas within the CMPA. Activities would include day hiking and backpacking trips and overnight camping by OMSI and DTA which are categorized as commercial, educational, and/or private organizations for the purpose of issuing SRPs.

OMSI will be providing two educational outdoor science camps in the CMPA during the 2004. The camps provide instruction to middle school and high school students about non-disruptive biological and geological field investigations. Students and instructors will be backpacking and camping in the Wilderness during a portion of each science camp.

The first program will run from July 2 through July 9 in the CMPA and Alvord Desert with activities occurring primarily in the Wilderness. This course is scheduled for 10 high school students and 2 instructors and will include a 5 night backpack trip in the Mud Creek/Ankle Creek area of the Wilderness. Students will conduct plant and animal transects in riparian and grassland environments.

The second program will involve 10 middle school students and 2 instructors and Will take place in the CMPA and the Alvord Desert from July 11 through July 16. Activities will include a day trip to the summit of Steens Mountain and a 3-day backpack trip in Little Blitzen Gorge. Students will participate in non-disruptive field investigations and instruction in a variety of natural history subjects.

The Desert Trail Association (DTA) is a non-profit recreation oriented organization dedicated to the development of the National Desert Scenic Trail and the preservation of the western desert. August 5 through August 7 the DTA will be sponsoring a backpack trip in Kiger Gorge in the CMPA and Wilderness. DTA officers will lead the trip which begins at Kiger Overlook and travels down into the Gorge traveling it's entire length, including privately-owned lands in the lower half of the canyon.

In addition to backpacking and camping in the Gorge participants will have the opportunity to learn about management practices on Steens Mountain by meeting with BLM officials and private land owners in the area. This hike is limited to 20 people, principally DTA members. Participants will be charged \$15 each to cover the cost of DTA's insurance for the trip.

Appropriate stipulations would be applied (Appendix 1) and additional special stipulations would be developed as needed to address any concerns raised during preparation of this EA.

B. No Action Alternative

No new SRPs, to include camping and overnight use in the CMPA would be issued under this alternative. Only operations which currently have valid SRPs or which do not include dispersed overnight camping would continue to provide services within the CMPA, Wilderness and Wilderness Study Areas located with the CMPA. The standard special stipulations attached to current special recreation permits (Appendix 1) would remain in effect.

C. Alternative Considered but Not Analyzed

Limiting the number of new SRPs to be issued in the CMPA, including the Wilderness and Wilderness Study Areas was not analyzed as attempting to do so, lacking specific data, would potentially exclude viable opportunities for commercial, educational and private organizations that would not create undue adverse effects to wilderness.

CHAPTER III. AFFECTED ENVIRONMENT

A. Critical Elements

The following critical elements of the human environment are not known to be present or would not knowingly be affected by the proposed action or alternative: Adverse Energy Impacts, Air Quality, American Indian Religious Concerns, Environmental Justice, Farm Lands (prime or unique), Floodplains, Paleontology, Wastes (hazardous or solid), and Water Quality (drinking/ground).

The following critical elements of the human environment are present or may be affected by the proposed action or alternative:

1. Areas of Critical Environmental Concern

There are 21 Areas of Critical Environmental Concern (ACECs) in the Burns District. Resource values associated with those ACECs most likely to be affected are listed below.

ACEC	Resource Value(s)
Steens Mountain	High scenic values on Steens Mountain, including the Steens escarpment, vista of East Rim, and glacial cirques and valleys
Alvord Peak	Special Status bighorn sheep and habitat
Little Blitzen Research Natural Area (RNA)	Mid-to-high elevation vernal pond, stream system in subalpine zone, aspen grove, snow deflation and snow cover communities, late-lying snowbeds, fescue grassland, Special Status plants
South Fork Willow Creek RNA	Downslope snow accumulation areas, upper cirque plant communities, stream system originating in a glacial cirque, Special Status plants
Little Wildhorse Lake RNA	Pristine, mid- to high-elevation lake
Rooster Comb RNA	Mountain mahogany/bluebunch wheatgrass and black

	cottonwood riparian plant communities
East Kiger Plateau RNA	Excellent condition, high elevation fescue grassland; Special Status plants
Kiger Mustang	Unique characteristics of wild horses
Diamond Craters Outstanding Natural Area	Geologic features

Existing practices as well as the proposed Andrew/Steens Resource Management Plan and Environmental Impact Statement would allow camping in Rooster Comb and Little Blitzen RNAs in areas where such use and activities has historically taken place and where such use is consistent with the purposes of the RNA. The proposed RMP also deletes the Steens Mountain ACEC due to adequate and overlapping protective designations.

2. Cultural Resources

Prehistoric archaeological sites in the Burns District range in complexity from surface lithic scatters to significant, buried, stratified, long-term encampments. These sites are often situated in locations that appeal to modern campers and, similarly, to commercial guide services. Historic sites are also located in appealing camp areas.

3. Migratory Birds

More than 70 species of migratory birds are known to pass through or breed and nest in the Burns District. Some species documented in surveys include sage thrasher, Brewer's sparrow, chipping sparrow, American robin, dusky flycatcher, gray flycatcher, loggerhead shrike, western meadowlark, red-winged blackbird, Brewer's blackbird, mourning dove, as well as many species of migratory shorebirds, waterfowl, raptors, and other songbirds.

4. Noxious Weeds

There are numerous infestations of noxious weeds in the Burns District, including Steens Mountain, where activities are proposed. However, most are very small. More information on exact types and locations is available at the Burns District Office. No specific sites would likely be affected by these particular SRPs.

5. Threatened, Endangered, and Special Status Species

There are 87 Special Status plant species in the Burns District. A complete list is available at the Burns District Office. One threatened or endangered plant species is found in the Burns District but not within the CMPA.

Special Status animal species in the Burns District include Columbia spotted frog (Federal candidate), Greater sage-grouse, California bighorn sheep, sage sparrow,

Northern goshawk, desert horned lizard, northern sagebrush lizard, spotted bat, Townsend's big-eared bat, and Preble's shrew. The Columbia spotted frog is associated with slower moving streams, backwaters, and beaver ponds in the Steens and northern portions of the Burns District.

Special Status fish species include Borax Lake chub (Federal endangered), Lahontan

cutthroat trout (Federal threatened), bull trout (Federal threatened), Malheur mottled sculpin, Catlow tui chub, Great Basin redband trout, and Alvord chub. Sport fisheries are managed by ODFW and regulated through angling restrictions. The Steens Act states ". . . the Secretary (Interior) shall manage recreational activities in the Redband Trout Reserve in a manner that conserves the unique population of redband trout native to the Donner und Blitzen River" and "In administering the Redband Trout Reserve, the Secretary shall consult with the advisory council and cooperate with the Oregon Department of Fish and Wildlife."

6. Wetlands and Riparian Zones

Wetlands and riparian zones are water-dependent ecosystems bordering rivers, streams, lakes, ponds, springs, and seeps throughout the Burns District. These areas act to dissipate stream energy and wave action, reduce streambank or shoreline erosion, filter sediments, and may provide temporary storage and later release of water. Riparian plant communities are generally more diverse than the surrounding upland plant communities and support a greater variety of aquatic and terrestrial species. Riparian areas surrounding springs and seeps are especially important in high desert ecosystems. Typical riparian vegetation includes willow, alder, sedges, rushes, and aspen.

7. Wild and Scenic Rivers

The Donner und Blitzen Wild and Scenic River (WSR) was designated as "Wild" in 1984. Segments of the WSR include Fish Creek, Little Blitzen River, Big Indian Creek, Little Indian Creek, South Fork Donner und Blitzen, and the Donner und Blitzen. Outstandingly Remarkable Values (ORVs) associated with this WSR are scenic, geologic, recreational, fisheries habitat, wildlife, vegetation, and cultural (historic). In 2000 Congress added Mud, Ankle, and South Fork Ankle Creeks to the Donner und Blitzen WSR through the Steens Act. Kiger, Wildhorse, and Little Wildhorse Creeks were also designated as "Wild" rivers. ORVs for Kiger Creek are scenic, fisheries habitat, and wildlife. ORVs for Wildhorse and Little Wildhorse Creeks are scenic, recreational, wildlife, and vegetation.

8. Wilderness and Wilderness Study Areas

Wilderness and Wilderness Study Areas (WSAs) within the CMPA (with acreage):

• Steens Mountain Wilderness	170,084 acres
• Blitzen River WSA	31,902 acres
• Bridge Creek WSA	14,325 acres
• High Steens WSA	13,965 acres
• Home Creek WSA	1,165 acres
• Lower Stonehouse WSA	7,449 acres
• South Fork Donner Blitzen WSA	27,969 acres
• Stonehouse WSA	22,765 acres

Naturalness - Naturalness refers to an area which "generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable." (BLM Manual 8560 - Management of Designated Wilderness) The Steens Mountain Wilderness and the Burns District Wilderness Study Areas (WSAs) are in outstanding natural condition except for certain areas that contain reservoirs, fences, and other humanmade elements. These features and ways (WSAs only) are generally not noticeable except when viewed from higher terrain or in the immediate vicinity.

Solitude - Solitude is defined as "the state of being alone or remote from habitations; isolation. A lonely, unfrequented, or secluded place." (BLM Manual 8560 - Management of Designated Wilderness)

Outstanding opportunities for solitude are enhanced by the varied and rugged topography. Vegetative screening in some areas, especially the creek and canyon bottoms, supplements the topographic screening. In wilderness there is an expectation that encounters with other users would be infrequent.

Primitive and Unconfined Recreation - Primitive and unconfined recreation is defined in 43 CFR 6301.5 as nonmotorized types of outdoor recreation activities that do not require developed facilities or mechanical transport.

There are outstanding opportunities throughout the wilderness and WSAs for primitive and unconfined recreation including hiking, backpacking, camping, horseback riding, hunting, fishing, photography, and sightseeing.

Supplemental Values - Supplemental values are listed in the Wilderness Act as "ecological, geological, or other features of scientific, educational, scenic, or historical value."

Supplemental values of both the wilderness and WSAs are geology, scenery, vegetation, and wildlife. Historical values, including the remains of old homesteads, can be found in the wilderness and many WSAs.

B. Noncritical Elements

Bureau specialists have determined that the following resources, although

present in the project area, are not affected by the proposed action or alternative: forestry/woodlands, geologic resources, lands and realty, livestock grazing, vegetation, and visual resources.

The following noncritical elements are present or may be affected by the proposed action or alternative:

1. Recreation

The CMPA hosts most of the recreation use in the Andrews Resource Area. Approximately 48,000 people visited Steens Mountain in 2001. Developed sites include, Fish Lake, Jackman Park, Page Springs, South Steens and Mann Lake Campgrounds. There are also dispersed recreation sites throughout the CMPA. Many dispersed campsites are found in pine, juniper, and aspen stands. Most recreationists visit the area during the late spring, summer, and fall. The low elevation areas are used during the late spring and fall, while the higher areas are used in late summer. Fall hunting seasons attract thousands of recreationists. The Andrews Plan Amendment for Recreation Access Surrounding the Steens Mountain Loop Road currently limits the number of general public wheeled vehicles allowed up the North Loop Road to the snow line to 30 vehicles per month during December, January, and February and 60 vehicles per month during March, April, and May, due to wintering wildlife concerns.

Hiking, equestrian use, and overnight camping are specific activities within wilderness. WSAs and other public lands are frequently used by vehicle based day touring and camping using open roads and ways.

2. Socioeconomics

The primary economic activities in Harney County are ranching, farming, manufacturing, and tourism. Federal, State, county, and local governments are major contributors to the Harney County economy. A 1994 study found that tourism associated with the Malheur National Wildlife Refuge generated \$4.4 million in Harney County over a 1-year period. Unemployment in Harney County is among the highest in the State - 14.1 percent in 2001 and approximately 8 percent in May 2002. The average value derived from recreation benefits would be \$40 per visitor day and visitor expenditures average \$30 per day (draft Andrews/Steens RMP, 2003.)

3. Wildlife

Wildlife commonly occurring in the Burns District includes mule deer, elk, pronghorn antelope, coyotes, badgers, ravens, magpies, golden eagles, chukar partridges, California quail, weasels, raccoons, porcupines, ground squirrels, chipmunks, mice, shrews, bats, woodrats, beavers, mountain lions, bobcats, black-tailed jackrabbits, and cottontail rabbits. The Burns District provides yearlong habitat for the species listed above.

4. Wild Horses

Three Wild Horse Herd Management Areas (HMAs) occur within the CMPA (Kiger, Riddle and South Steens). Wild horses are often an attraction to recreationists and certain SRP holders may be interested in viewing the wild horse herds as part of their permitted activities. Both Kiger and South Steens herds contain animals of interesting color and character.

CHAPTER IV. ENVIRONMENTAL CONSEQUENCES

A. Critical Elements

1. Areas of Critical Environmental Concern

a. Proposed Action and No Action Alternative

Camping in RNAs could be detrimental to key vegetation types and Special Status plant species. The expansion of existing campsites from continued use could affect the unique plant communities and scenic qualities of the Steens Mountain ACEC and the Special Status plant species in the other ACECs.

The possible effects would be mitigated through closing RNAs to camping where impacts to resources of concern could occur. This closure is currently in effect. Existing practices as well as the proposed Andrew/Steens Resource Management Plan and Environmental Impact Statement would allow camping in Rooster Comb and Little Blitzen RNAs in areas where such use and activities has historically taken place and where such use is consistent with the purposes of the RNA. The proposed RMP also deletes the Steens Mountain ACEC due to adequate and overlapping protective designations.

2. Cultural Resources

a. Proposed Action and No Action Alternative

Ground-disturbing activities at campsites could disturb both surface and buried cultural and historic artifacts. Surface and buried artifacts could be collected and removed from sites. This would reduce the integrity of sites and reduce the information that could be gathered. These possible effects are considered minimal and would be further mitigated through continued surveys, data collection and protections of significant sites.

3. Migratory Birds

a. Proposed Action and No Action Alternative

Many of the trails proposed for use are along riparian areas which migratory birds and other larger wildlife depend on for water, food, and breeding and nesting habitat. Use of these trails, camping in or near riparian areas, and fishing activities could disturb breeding and nesting migratory birds. Disturbance and the associated flushing of birds opens their nests to predation and destruction or nest parasitism by brown-headed cowbirds.

These possible effects would be mitigated by applications of permit stipulations prescribing 'Leave No Trace' practices. Harassment of wildlife is prohibited by state law.

4. Noxious Weeds

a. Proposed Action and No Action Alternative

Noxious weed seeds could be brought into the Burns District through the permittee's activities. Equipment and vehicles could bring in noxious weeds from other areas of the State or neighboring states. These possible effects would be mitigated by weed prevention education programs.

Monitoring of use areas will determine areas of new weed introductions for early treatment as appropriate for each location.

5. Threatened, Endangered, and Special Status Species

a. Proposed Action and No Action Alternative

Special Status plant species could be trampled and seed development disrupted through the use of high elevation areas around lakes (Wildhorse Lake, for example), vernal ponds, wetlands, and riparian areas.

Travel past Greater sage-grouse leks would generally not disturb the birds. However, lek visits on a continued basis (day after day) to view strutting activities could cause male sage-grouse numbers at the leks to decrease. The grouse may move to other established leks or to a new area and form a new lek. Disturbance at a lek site, which causes the birds to flush, would increase their visibility to predators and could increase predation. Neither SRP plans activities during sagegrouse lek use periods.

Angler wading during spawning season could cause redd trampling and egg mortality. Because river use would overlap with redband trout spawning season, rafts or inflatable kayaks could disturb redband trout redds. Any effects would be site-specific depending on flow, channel

configuration, and location and amount of redband spawning habitat.

These effects are mitigated by prohibition or restriction of camping at Wildhorse and Little Wildhorse Lakes and permit stipulations requiring application of 'Leave No Trace' principals around riparian and wetland areas, wildlife areas and spawning redds.

6. Wetlands and Riparian Zones

a. Proposed Action and No Action Alternative

Camping in riparian areas could affect riparian vegetation and streambanks, leading to soil compaction, increased erosion into streams, and reduction of shade over streams.

Many existing campsites throughout the Burns District are located in riparian areas. Requiring a permitted outfitter to camp outside of riparian areas would not reduce effects to these areas, because the general public would continue to use them. There would be an increase in overall disturbance because new campsites would be created if the permittee is required to camp outside of riparian areas.

'Leave No Trace' principals will be prescribed in permit stipulations. Monitoring will determine if excessive impacts are occurring due to camping.

7. Wild and Scenic Rivers

a. Proposed Action and No Action Alternative

Scenic and Geologic ORVs - These ORVs would not be affected.

Recreational ORV - See discussions below for *Wilderness-Primitive and Unconfined Recreation* and *Recreation*.

Fisheries Habitat ORV - See discussion above for Threatened, Endangered, and Special Status Species.

Wildlife ORV - See discussions above for Migratory Birds and below for Wildlife.

Vegetation ORV - See discussions above for ACECs, Noxious Weeds, and Wetlands and Riparian Zones.

Cultural (Historic Sites) ORV - See discussion above for Cultural Resources.

8. Wilderness and Wilderness Study Areas

a. Proposed Action and No Action Alternative

Naturalness – Some campsites could continue to experience seasonal vegetative cover losses and barren ground increases caused by normal camping activities. Over time, social trails between tents and from the hiking trail to the river crossing could become more obvious. The barren cores of the campsites could gradually increase over time and the amounts of dead and down wood available could decrease. Campsites are also used by private groups, which could contribute to the effects discussed above.

Solitude - Effects to solitude would be mostly confined to trail encounters and other groups camped within sight and sound of campsites used by permittees. Most encounters would be occasional and, overall, solitude would not be affected. At Wildhorse Lake, it would be impossible to find solitude. Because of the open terrain, most visitors do not expect to experience solitude.

Primitive and Unconfined Recreation - Opportunities for primitive and unconfined recreation would still exist. Occasionally, other hiking groups could be displaced from popular camping areas, leading to the creation of new campsites by those groups that are unwilling to hike to an established site. Fishermen could be occasionally displaced by the fishing parties.

Supplemental Values - Geology and historic supplemental values would not be affected. Effects to the supplemental values of vegetation and wildlife are discussed in the Threatened, Endangered, and Special Status Species and Wildlife sections.

These values will be monitored and further restrictions to future SRP and other Wilderness users could be implemented as needed in accordance with the Wilderness Plan.

B. Noncritical Elements

1. Recreation

a. Proposed Action and No Action Alternative

Effects to the recreation experiences of hikers, backpackers, and horseback riders both within and outside the wilderness and WSAs are described above in the Wilderness and WSA *Primitive and Unconfined Recreation* discussion.

2. Socioeconomics

a. Proposed Action and No Action Alternative

The following example of effect is reprinted from Steens Mountain Packer's permit as shown in EA-OR-020-03-038.

"Using SMP's average past use and reported and estimated costs for the listed activities, revenue generated could total up to \$114,825. This figure was calculated using seven 1-day horse trips each with 10 people, four 5-day horse pack trips each with 10 people, four big game hunting trips each with six hunters, and one 1-day tour with 15 people. Because SMP is based in Frenchglen, Oregon, it is expected that most of this revenue would be spent in Harney County."

New permit holders may generate revenue to be spent in Harney County, other areas of Oregon and the Nation. Expected revenues are limited, but may be expected at about \$30 per visitor day.

3. Wildlife

a. Proposed Action and No Action Alternative

Most species of wildlife would be affected by some aspect of these proposals through disruptions and displacement of wildlife, their activities, and their habitat.. The degree of effect from the proposed action or no action alternative would vary with the number of trips. The effects would be mitigated by applying 'Leave No Trace' stipulations to the SRPs.

4. Wildhorses

a. Proposed Action and No Action Alternative

Wild horses are routinely viewed near roads and trails. Some SRP holders may venture off-trail, by foot or horseback, to view horses in more remote areas.

Horses may be disturbed or displaced by SRP activities in the short term. The effects would be mitigated by applying 'Leave No Trace' stipulations to SRPs.

CHAPTER V. CUMULATIVE EFFECTS

This cumulative effects analysis focuses on the Steens Mountain CMPA, including the Steens Mountain Wilderness, and the WSAs. Because use in the remainder of the Burns District would be light, there should be no measurable cumulative effects in that area.

The Andrews/Steens Resource Management Plan estimated completion date is the fall of 2004. It is anticipated that if changes are made to the Burns District SRP program, due to monitoring showing problems or due to policy changes, any changes to future SRPs would be analyzed and implemented at that time.

A. Past Recreation Use

In the past, recreation use in the Steens Mountain Area has varied considerably from year to year, but overall there has been an upward trend. Most recreation use data has been collected through the use of road counters to measure the number of vehicles traveling up either the North or South Steens Mountain Loop Road. This raw data is modified to account for vehicles entering and leaving the area and the number of people per vehicle. A formula, developed from a 1991 study, is used to calculate the number of people visiting the Steens Mountain. Reported total visitor use for the past 5 years, 1997 to 2001, has varied from a high of 52,860 in 1997 to a low of 37,308 in 1998. In 2001 visitor use was 47,947. The use numbers calculated from road counter data do not differentiate between public and permitted use. The average SRP use (1,735) for all permittees accounts for less than 4 percent of the average visitor use for the past 5 years (44,705).

Past SRP Use					
Permittee (Years Considered in Average)	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land	Average No. of Trips	Average Client Days on Public Land
Broken Trails 1998-2001	Hunt - Big Game (12) Tour (11)	23	284	6	71
High Desert Outfitters 1997-2001	Fishing (10) Hunt - Big Game (8)	18	216	4	43

Past SRP Use					
Permittee (Years Considered in Average)	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land	Average No. of Trips	Average Client Days on Public Land
Brett Jantze Guide Service 1999-2001	Hunt - Big Game (3)	3	16	1	5
Oregon Llamas 1997-2001	Fishing (1) Llama Trek (7)	8	286	2	57

Pro Consulting & Guide Service 1998-2001	Hunt - Big Game (4) Scout - Big Game (12)	16	64	4	16
"SPOT" Country Outfitters 1997-2001	Hunt - Big Game (11)	11	116	2	23
Steens Mountain Packers 1997-2001	Heli-fishing (3) Horse - Day (35) Horse - Pack (17) Hunt - Big Game (18) Scout - Big Game (1) Tour (5) Cross-country Ski (1)	80	699	16	140
Steens Mountain Running Camp 1997-2001	Running Camp (10) Football Camp (2)	12	6,904	2	1,380
Total		171	8,585	37	1,735

B. Present Recreation Use

The Steens Act designated the Steens Mountain CMPA and the Steens Mountain Wilderness on October 30, 2000. These designations have focused more public attention on the area, but this has not yet been reflected in increased public and permitted recreation use. The 2001 SRP use (1,700) accounts for less than 4 percent of the total 2001 visitor use (47,947).

2001 SRP Use			
Permittee	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land
Broken Trails	Tour (5)	5	124
High Desert Outfitters	Hunt - Big Game (2)	2	12
Brett Jantze Guide Service	Hunt - Big Game (1)	1	3
Oregon Llamas	Fishing (1) Llama Trek (1)	2	70

2001 SRP Use			
Permittee	Activity (No. of Trips/Sessions)	Total No. of Trips	Total Client Days on Public Land
Pro Consulting & Guide Service	Hunt - Big Game (3) Scout - Big Game (2)	5	22

"SPOT" Country Outfitters	Hunt - Big Game (1)	1	4
Steens Mountain Packers	Horse - Day (5) Horse - Pack (1) Hunt - Big Game (1) Tour (2)	9	41
Steens Mountain Running Camp	Running Camp (10)	2	1,424
Total		27	1,700

C. Reasonably Foreseeable Future Actions

It is expected that both public and permitted recreation use in the Steens Mountain Area would continue to grow. If the growth rate of 8 percent (average increase from 1998 to 2001) is applied to the 2001 use figures, an estimated 56,000 people could visit Steens Mountain in 2004. It is anticipated that the number of SRPs for both commercial and organized groups would also grow. Many of the new permits may be for previously unpermitted activities that have been occurring for many years. The use numbers associated with these new permits are already reflected in the estimated total use figures. Average SRP use may grow faster than the 8 percent rate, which would reflect a change from unpermitted to permitted activities. This could also be reflected in a decrease in the growth rate for public use of the Steens. Overall growth for the analysis period is not expected change.

D. Cumulative Effects Analysis

There may be cumulative effects from other nonrecreation activities, but there is insufficient information to analyze them at this time.

The proposed action and alternative have been evaluated for potential cumulative effects to resources. It has been concluded that cumulative effects to ACECs; Cultural Resources; Migratory Birds; Noxious Weeds; Threatened, Endangered, and Special Status Species; Wetlands and Riparian Areas; Wild and Scenic Rivers; Wilderness and WSA; Recreation; Wild Horses; and Wildlife would be negligible as a result of implementing the proposed action or alternative. Socioeconomic effects could be anticipated from outfitter/guide clients returning to the area as future tourists, thus contributing to the local economy.

This conclusion is based on a number of factors. The number of trips would be small, when compared to general public activities. Camps are usually set up in existing, previously disturbed sites. Outfitter/guide clients frequently return to the area, further contributing to the Harney County economy.

It is anticipated that overall use would not increase to the point that there would be cumulative effects to any resource, from these two new SRPs. Effects are anticipated to be short-term and have minimal overall impact. Effects will be monitored as part of either the wilderness monitoring plan in the Wilderness or

through outfitter/guide compliance checks in the remainder of the CMPA. If conditions related to these activities exceed the thresholds from the established monitoring baseline in the Wilderness management actions as described in the wilderness management plan will be initiated to mitigate and correct the effects for future SRPs.

CHAPTER VI. MITIGATION MEASURES AND MONITORING

A. Mitigation Measures

1. Critical Elements

a. Areas of Critical Environmental Concern

Vehicle use in ACECs would conform to the current OHV designation. Camping would be allowed in Little Blitzen and Rooster Comb RNAs in areas that have been historically used for such purposes and where is remains consistent with the purposes of the RNA and disallowed in other RNAs.

b. Cultural Resources

Traditionally used campsites would be inventoried systematically and assessments would be made, to allow the BLM to make better judgments about the effects of new SRPs.

c. Migratory Birds

Camping would be limited to established campsites that are appropriate for Group use.

Permittee would be aware of nesting activities and would avoid disturbing nesting birds from April 15 to July 15. Permittee would be notified of specific nesting areas as part of the pre-trip notification process.

d. Noxious Weeds

To ensure that noxious weed seeds are not spread from other areas, all vehicles and equipment would be cleaned prior to entry on Burns District land. If permittee camps in or travels through noxious weed-infested areas, equipment and vehicles would be cleaned on-site.

Weed identification booklets and information would be given to the permittee. The permittee would be requested to notify the BLM of the location(s) of any noxious weeds found.

e. Threatened, Endangered, and Special Status Species

Camping would be limited to established campsites that are appropriate for group use. All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

All wildlife viewing would follow Leave No Trace wildlife viewing guidelines. These guidelines include observing wildlife from a distance and not following or approaching them. Permittee would be notified of specific areas as part of the pre-trip notification process.

f. Wetlands and Riparian Zones

All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

Down trees would not be removed from streambanks.

g. Wilderness and Wilderness Study Areas

If monitoring shows that recreation impact thresholds are met or exceeded then appropriate changes to recreation uses or restorative efforts will be applied to future SRPs. This may include additional camping SRP analysis appropriate to NEPA prior to issuing additional SRPS.

Camping would be limited to established campsites that are appropriate for group use. Prior to the establishment of any new campsite in wilderness, the permittee would consult and coordinate with the BLM to minimize any effects to naturalness, solitude, primitive and unconfined recreation, and supplemental wilderness values.

All permittee activities would incorporate "Leave No Trace" practices.

Travel would be single file on defined trails or spread out where no trails exist.

All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

Cat holes would be used for solid human waste at backpack camps.

All toilet paper would be packed out.

2. Noncritical Elements

a. Recreation

All human waste should be packed out on vehicle-supported trips or buried at least 200 feet or as far as possible away from camps, trails, and water sources on backpack trips.

Water from all washing (dishes and personal) activities would be scattered at least 200 feet or as far as possible away from all water sources.

Prior to the establishment of any new campsite, the permittee would consult and coordinate with the BLM to minimize any effects.

b. Wildlife

Camp tents and yurts would be taken down after each use and not left for the next trip. Camps near isolated water sources (ponds, springs) would be at least one-quarter mile from the source to allow for wildlife access.

c. Wild Horses

All vehicles would remain on designated roads. Permittee would not attempt to drive closer to the horses. Permittee would follow Leave No Trace guidelines for wildlife viewing. These guidelines include observing wildlife from a distance and not following or approaching them.

B. Monitoring

The following monitoring occurs in the CMPA for program management purposes but not specifically for these SRPs.

1. Critical Elements

a. Areas of Critical Environmental Concern

RNAs would be visually monitored periodically for natural or human-caused disturbances.

Key plant species would be monitored at specific sites to determine changes in population health.

b. Cultural Resources

Traditionally used campsites would be inventoried and any effects to cultural resources would be measured.

c. Migratory Bird

Bird monitoring transects would be established according to protocol along riparian areas used by the permittee.

d. Noxious Weeds

BLM would monitor camping and parking areas for the presence of new or spreading noxious weeds.

e. Threatened, Endangered, and Special Status Species

Ongoing monitoring of known Columbia spotted frog populations would continue.

ODFW data on male sage-grouse attending leks would be used. Traffic counters would be placed on roads near leks that receive many visits to determine the effects of visitor use on number of male sage-grouse attending those leks.

f. Wilderness and Wild and Scenic Rivers

Wilderness and WSR monitoring would be based on the non-degradation. A Wilderness and WSR monitoring plan is part of the Wilderness/WSR Management Plan and will consider and evaluate both commercial and public use of these resources.

2. Noncritical Elements

a. Recreation

BLM would monitor all SRPs for compliance with permit stipulations.

b. Wildlife

ODFW big game count data would be used as an indicator of effects to wildlife.

CHAPTER VII. CONSULTATION AND COORDINATION

A. List of Preparers

Karla Bird, Andrews Field Manager
John Neeling, Outdoor Recreation Planner (Wilderness)
Evelyn Treiman, Outdoor Recreation Planner

B. List of Additional Preparers for referenced EA (OR-020-03-038)

Dean Bolstad, Wild Horse Management Specialist
Darren Brumback, Fisheries Biologist
Jon Collins, Natural Resource Specialist
Gary Foulkes, Planning and Environmental Coordinator
Terri Geisler, Geologist (HazMat)
Rick Hall, Natural Resource Specialist (Botanist)
Fred McDonald, Natural Resource Specialist (Recreation)
Matt Obradovich, Wildlife Biologist
Skip Renschler, Realty Specialist
Jon Reponen, Natural Resource Specialist (Forester)
Lesley Richman, Natural Resource Specialist (Noxious Weeds)
Joan Suther, Three Rivers Field Manager
Fred Taylor, Wildlife Biologist
Nora Taylor, Botanist/Ecologist
Scott Thomas, Archaeologist
Cindy Weston, Fisheries Biologist

C. Public Notice and Availability

A notice will be placed in the Burns Times-Herald announcing the document's Availability, along with the Decision Record and FONSI. The documents will also be available on the Burns District environmental documents Web page.